

Reaching Children Through School-based Dental Sealant Programs to Prevent Tooth Decay

Public Health Problem

Tooth decay (cavities) has declined dramatically among school-aged children due to preventive strategies such as community water fluoridation and use of fluoride toothpastes and mouth rinses. Despite these gains, tooth decay remains a significant problem with disparities noted for poor children and those of some racial and ethnic groups. In the United States, 52 percent of children between the ages of 5 and 9 have had a cavity. Only 23 percent of all 8-year-olds in the United States have at least one dental sealant, and only 3 percent of 8-year-olds racial minorities living in poverty have a dental sealant.

Dental sealants, a plastic coating placed in the pits and grooves of molar teeth, have been proven to prevent dental cavities on these chewing surfaces. The U.S. Task Force on Community Preventive Services has reviewed the scientific evidence of effectiveness of school-based and -linked dental sealant programs, which demonstrates a reduction in dental cavities of 60 percent. The Task Force issued a strong recommendation for school-based sealant delivery programs.

Taking Action

Nevada has made significant progress in implementing school-based/-linked dental sealant programs. With a cooperative agreement from CDC, Nevada has funded vital state oral health program infrastructure, including a state sealant program coordinator and state oral health program manager. In one effort, the state has targeted dental sealant programs to schools in low-income areas. It identified 128 of 321 elementary schools statewide as eligible; 29 percent of the eligible schools now have a school-based or school-linked sealant program. During the 2003-2004 school year, 3,677 sealants were provided for 1,211 second grade schoolchildren.

A major milestone was recently reached by the Oral Health Program in developing and signing a Memorandum of Understanding with the Clark County School District to implement a school-based dental sealant program (60 percent of the eligible schools and 70 percent of Nevada's population are located in Clark County).

Implications and Impact

The agreement opens the path for establishing new sealant programs in Clark county soon. Included in the Clark County partnership is the new University of Las Vegas School of Dental Medicine. Capitalizing on this increase in infrastructure, Nevada also is strengthening its capacity to monitor oral disease, plan and evaluate state programs, extend water fluoridation, and strengthen its coalitions and partnerships.